

MSPC Advisory Circular

ENVIRONMENTAL PROTECTION AGENCY OFFICE OF AIR PROGRAMS • MOBILE SOURCE POLLUTION CONTROL PROGRAM

A/C No. 9A

November 14, 1972

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Subject: Allowable Maintenance on Emission Control System Components for the 1974 Model Year

A. Purpose

The purpose of this Advisory Circular is to supersede Advisory Circular No. 9, "Allowable Maintenance on Emission Control Components for the 1974 Model Year", to reflect the revised criteria on which maintenance of Exhaust Gas Recirculation (EGR) systems will be allowed on 1974 model year vehicles, and to allow increased intervals for spark plug replacement. Advisory Circular No. 9 is obsolete and should be discarded.

B. Background

- 1. Section 85.90(a)(1)(ix) of the regulations provides that engine or fuel system maintenance, other than as specifically provided in 85.90(a)(1), is permitted only with the advance approval of the Administrator. In response to requests for permission to perform periodic maintenance on Exhaust Gas Recirculation (EGR) systems, which are not specifically authorized to be maintained under Section 85.90(a)(1), letters were issued to manufacturers on November 19 and December 9, 1971, in which the basis for allowing such maintenance on durability vehicles for the 1973 and 1974 model years was set forth.
- 2. Advisory Circular No. 9, issued May 5, 1972, incorporated into the Advisory Circular system the substance of the above two letters pertinent to EGR system maintenance for 1974 model year vehicles. In brief, maintenance was to be allowed if: a) failure of the control system provided sufficient notice to the vehicle operator in terms of adverse driveability, b) failure of the control system provided a noticeable signal to the vehicle operator, or c) in the case of periodic maintenance, failure to perform the recommended maintenance within the specific limits provided a noticeable signal to the vehicle operator. Any one of these criteria was deemed to provide a reasonable likelihood that EGR control system maintenance would be performed as required in the field.
- 3. Upon further evaluation, EPA has determined that the criteria specified in Advisory Circular No. 9 for the approval of emission control component maintenance for the 1974 model year should no longer be applicable and need to be revised.
- 4. Present regulations allowing spark plug replacement every 12,000 miles for small engines and 24,000 miles for large ones are considered unrepresentative in view of recent studies of in-use vehicle spark plug replacement. Therefore, under authority of 40 CFR 85.90(a)(1)(ix), EPA will allow more frequent spark plug replacement to be performed.

C. Basis for Allowing Maintenance

- For the 1974 model year, EPA will approve a reasonable level of periodic maintenance of the EGR system under the provisions of 40 CFR 85.90(a)(1)(ix). The basis for EPA's determination of a reasonable level of periodic maintenance will be the same criterion which was used for the 1973 model year: That the manufacturer include that minimum mileage interval in the maintenance instructions furnished to the ultimate purchaser of the motor vehicle covered by the applicable certificate of conformity. The minimum mileage interval for which periodic EGR system maintenance was approved for 1973 model year durability vehicles was 12,000 miles (i.e., EGR system maintenance at 12,000, 24,000, and 36,000 miles). A condition for approval of EGR system maintenance is that the results from the "before" and "after" emission tests be used in the calculation of the deterioration factor. The inclusion of these data in the calculation is in accordance with the inclusion of the same type of data under 40 CFR 85.92(b).
- For the 1974 model year, under authority of 40 CFR 85.90(a) (1)(ix), EPA will allow scheduled spark plug replacement for all vehicles at the 12,000, 24,000, and 36,000 mile test points. A condition for approval of spark plug replacement at these test points is that the test results from the "before" and "after" spark plug replacement maintenance be used in the calculation of the deterioration factor. The inclusion of these data in the calculation is in accordance with the inclusion of the same type of data under 40 CFR 85.92(b).
- There are two additional conditions for approval of any scheduled maintenance authorized under 40 CFR 85.90(a)(1)(ix). The first condition is that all such maintenance, and any major engine tune-up occurring at the same mileage interval, be performed at the same time. The purpose of this requirement is to reduce the number of possible emission tests and to let one set of "before" and "after" emission tests show the net effect of all the major maintenance performed at the respective test point. The second condition is that approval for such maintenance must be given prior to the initiation of durability testing.

How to Request Authorization to Perform Maintenance D.

Requests for authorization to perform scheduled maintenance under 40 CFR 85.90(a)(1)(ix) shall be directed to the Certification and Surveillance Division, Environmental Protection Agency, 2565 Plymouth Road, Ann Arbor, Michigan 48105.

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